

NEMAIS

Enterprise Resource Planning (ERP)
Impact on NAVSEA Logistics Technical Data
RIC Brief
26 June 01

NAVSEA 04L2

Purpose

- ★ Provide a brief overview and definitions of ERP, NETS and NEMAIS
- ★ Provide status of what has happened to date
- ★ Provide our perception of the initial impact on NAVSEA Logistics Technical Data
- ★ Provide synopsis of NSWC comments pertaining to the NEMAIS Technical Documentation Incorporation White Paper
- ★ Begin dialog on “how to” communicate these findings to appropriate decision makers/data owners

ERP acronyms

- ★ NEMAIS *Navy Enterprise Maintenance Automated Information System*
(the maintenance business “Enterprise”)
- ★ SAP *Systems Application Project* *(the ERP COTS “software”)*
- ★ NETS *Navy Enterprise Team Ships* *(the “team”)*

ERP Defined

- ★ Enterprise **resource planning (ERP)** is a core information system that will enable the navy to improve and standardize business processes across organizational, intermediate, and depot maintenance activities.
- ★ An ERP solution will:
 - ★ *Integrate business processes.*
 - ★ *Share common data and processes across navy ship maintenance organizations.*
 - ★ *Make data available in a near real-time environment.*
 - ★ *Provide consistent information across ship classes.*

Current Navy ERP Projects

Project	Sponsor	Core s/w
Program Management	NAVAIR	SAP
Supply & Maintenance	NAVSUP/NAVAIR	SAP
Aviation Re-engineering (SMART)		
Navy Working Capital Fund	SPAWAR	SAP
<i>Regional Maintenance (NEMAIS)</i>	<i>NAVSEA/CLF</i>	<i>SAP</i>

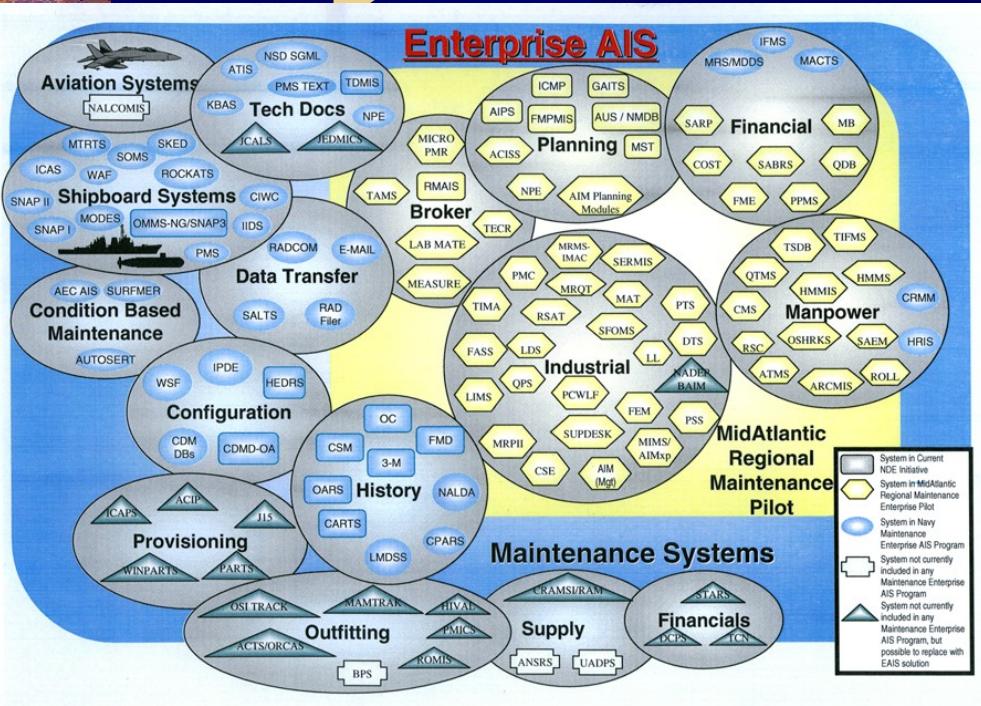
- **4 Approved and Funded Programs**
- **Each Program is 12-18 months**
- **NAVAIR and NAVSUP/NAVAIR Pilots team with E-2 community for “proof of concept”**

What is NEMAIS?

- ★ The Navy Enterprise Maintenance Automated

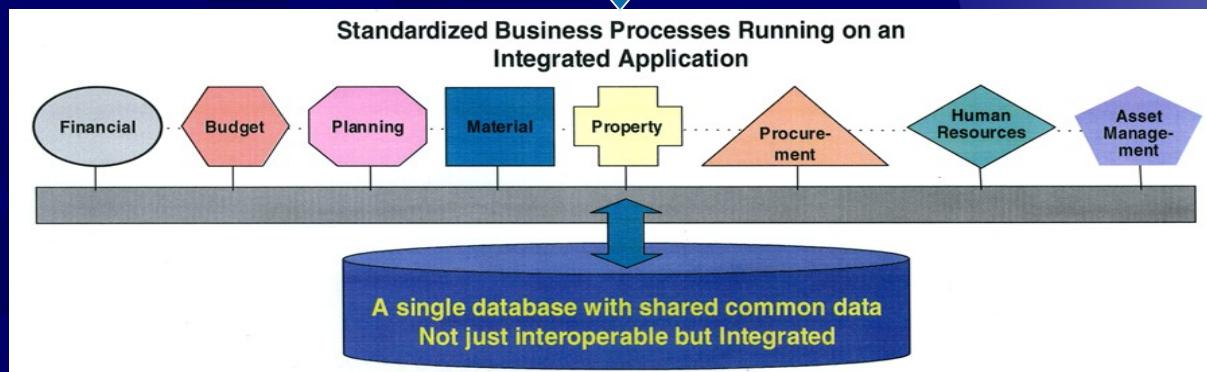
Information System (NEMAIS) is a phased effort that will install an ERP System in all Naval Shipyards, Supervisor of Shipbuilding sites, Shore Intermediate Maintenance Activities, Trident Refit Facilities, and all Naval ships and submarines.

Regional Maint ERP “As Is”



What
We Have
Today

What
ERP can
Provide



NEMAIS Partners - NETS

Team NAVY



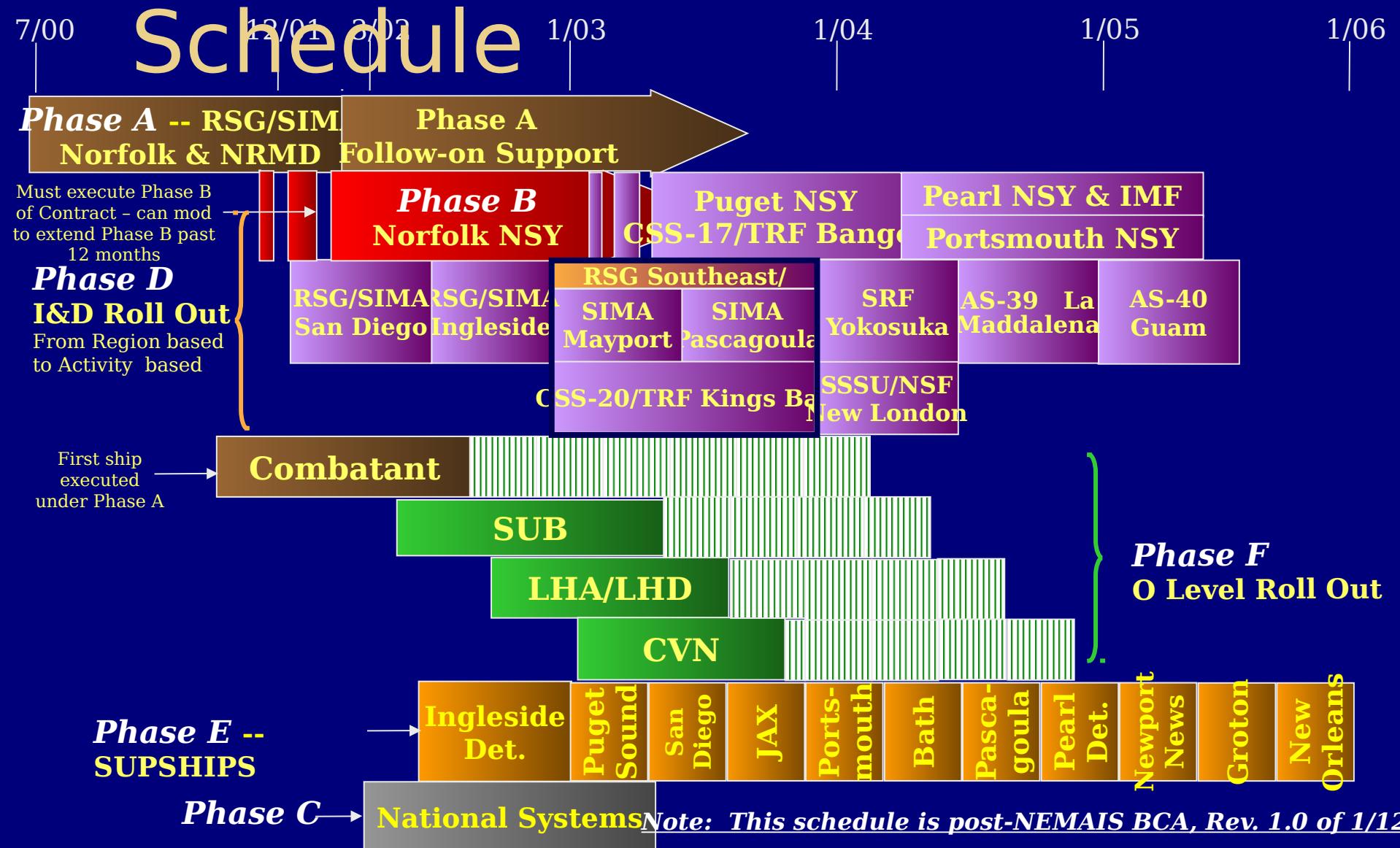
VENDOR



What is the NETS?

- * The Navy Enterprise Team Ships (NETS) is a team of approximately 130 government and 120 vendor full-time personnel tasked with developing, testing and implementing the NEMAIS solution. More than 15 commands (including TYCOMs, FTSC, RSG, SIMA, SPAWAR, NNSY, Supships, and NAVSEA) have provided personnel to support this effort.

Notional Deployment

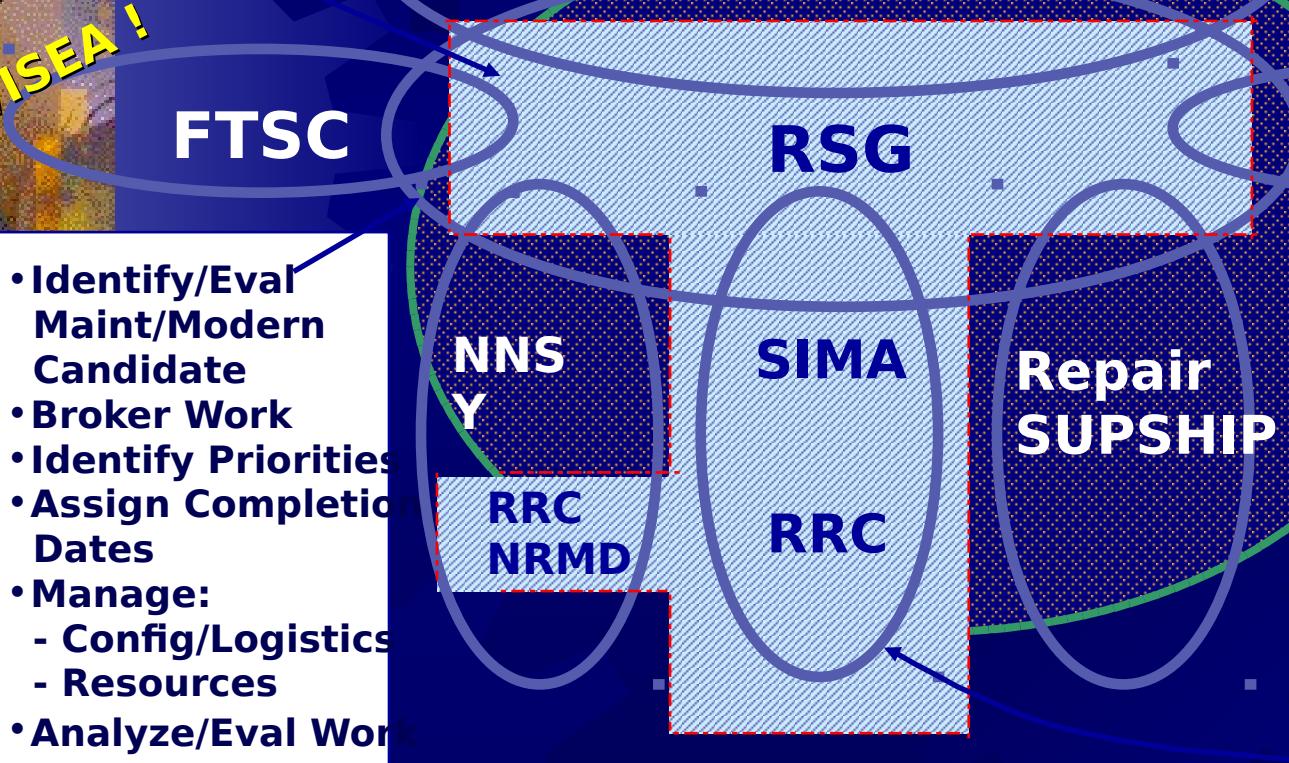


Regional Maintenance ERP...The LCM Phase A

What's missing?
ISEA!

"O" Level Organizations

NAVSUP
Supply
Chain
ERP Pilot

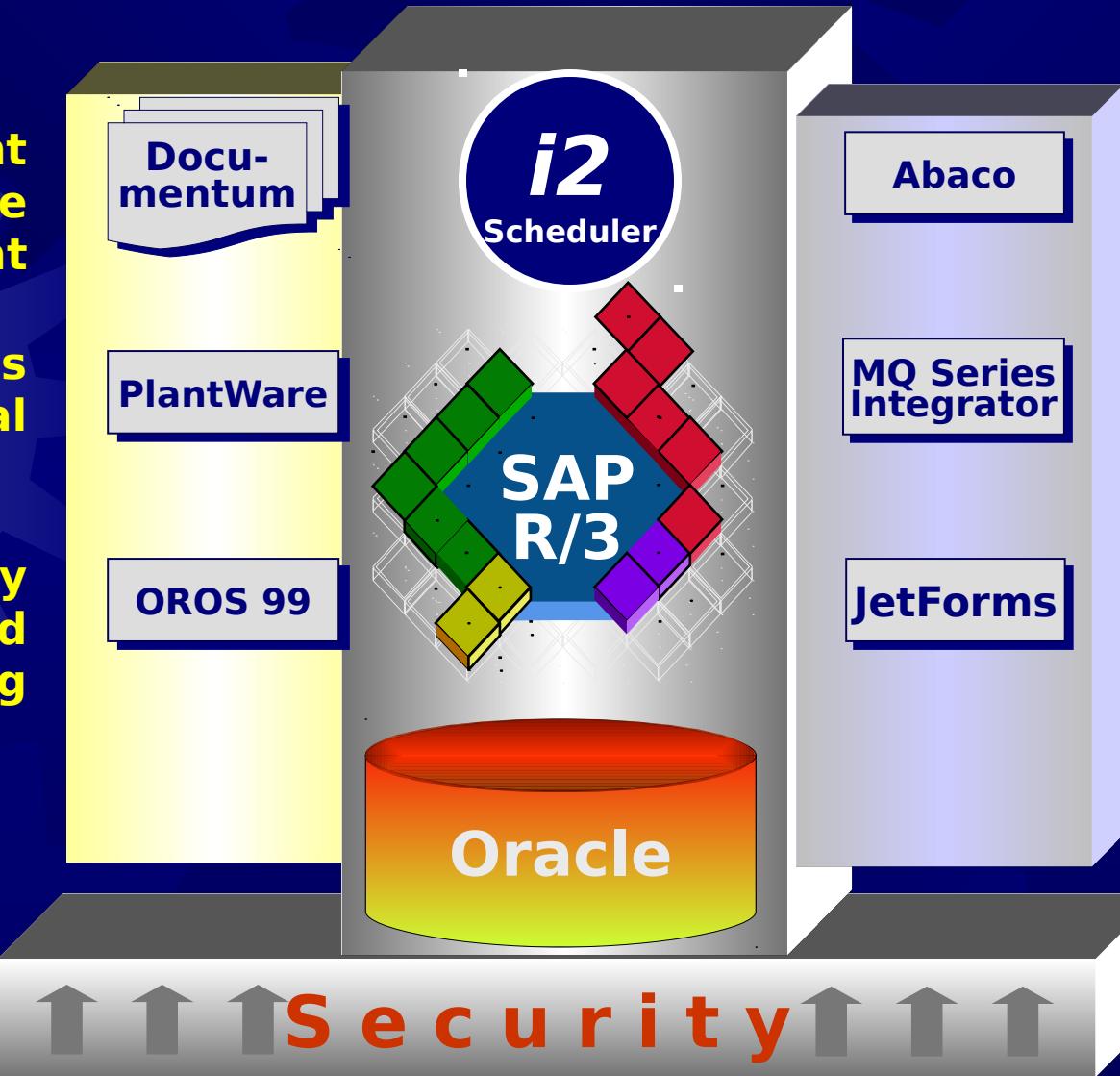


Software Technical Solution

Document Management

Hazardous Material

Activity Based Costing

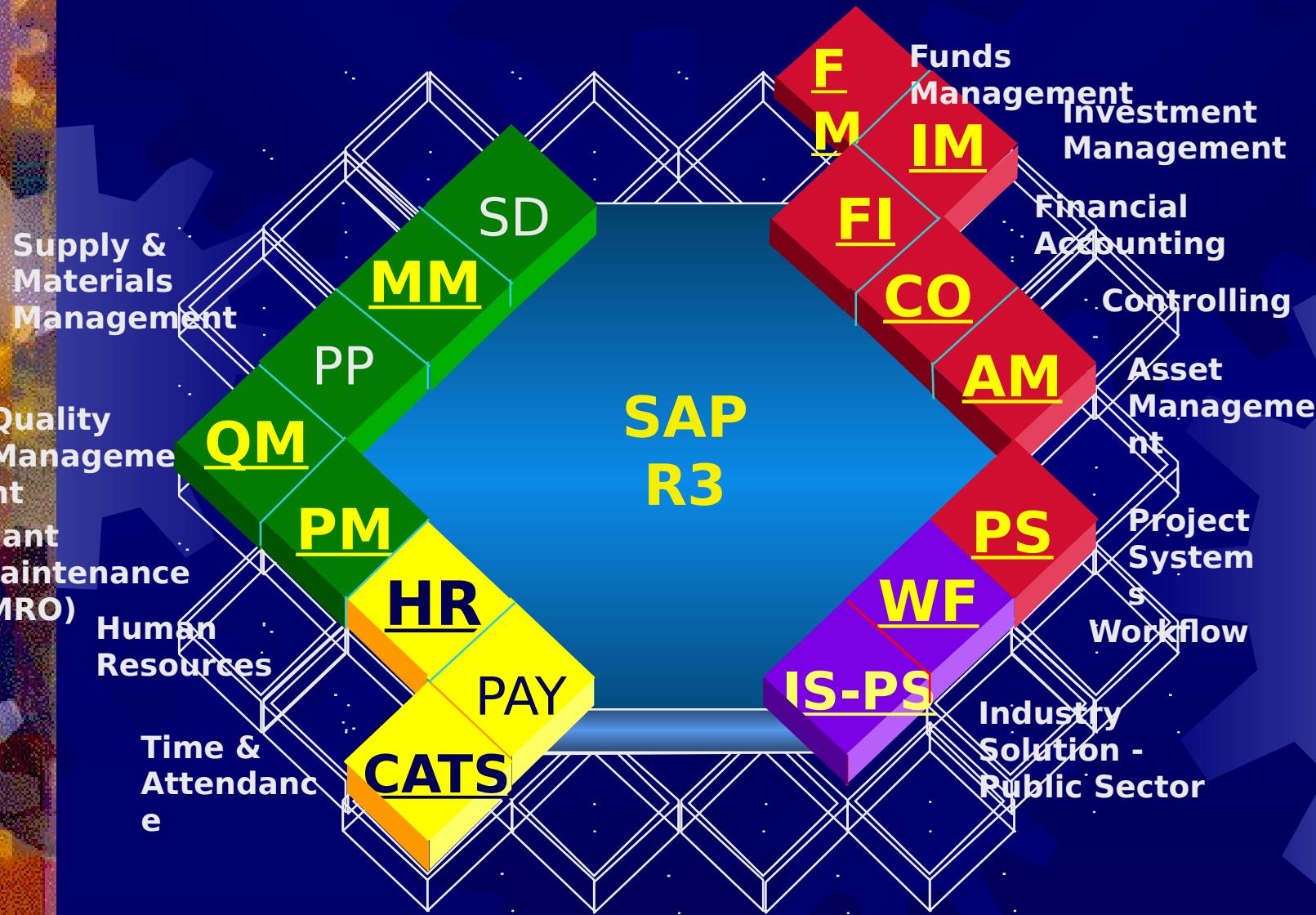


RF Barcode

Legacy System Interface

Forms

The SAP Solution



ERP Project Metrics

- ★ **Must be operational at RSG/SIMA Norfolk by 26 Nov 01**
- ★ **Must be extensible to O, I, and D Level activities in all regions**
- ★ **Leverage best practices from industry and government**
- ★ **No core code software changes**

What has happened to date

- ★ 12 February - NETS team brief NAVSEA Philadelphia (NSWCCD) Senior Leaders and requested ISEA/LCM participation
- ★ 30 March - NETS OPS LOG Documentation Lead requested NSWC assistance in developing the “To-Be” business process model for Managing Technical Documentation
- ★ 7 April - Mr. Gundrum NSWC BIM, task Tim Kriegel NAVSEA Philadelphia, to lead implementation of the NEMAIS “Blueprint” for NSWC and requested we engage as much of NSWC as possible

What has happened to date (cont)

- ★ 1 May - 3 May “To-Be” business process model for Managing Technical Documentation Workshop hosted by NAVSEA Philadelphia
 - ★ Philadelphia (T. Kriegel/M. Cohen/J. Grugan/T. Bodman and others)
 - ★ Carderock (J. Garner and others)
 - ★ Port Hueneme (W. Honea and others)
 - ★ Crane (S. Rhea and others)
 - ★ Dahlgren (T. Armentrout and others)
 - ★ Indian Head (D. Krause)
 - ★ NSDSA (B. Titsworth)
 - ★ OPNAV N40 (J. Lindsey)
 - ★ NAVSEA 04L (D. Cross-Cole)
 - ★ NUWC, FTSCPAC/LANT, PSNS, Electric Boat, AMSEC LLC and others.....
 - ★ SEA92L (L. McGowan provided input to White Paper)

What has happened to date (cont)

- ★ Working Groups were established to define “To-Be” process for:
 - Determine Technical Authority
 - Issue notification of new technical documentation
 - Create new document
 - Convert document
 - Search for existing or related technical documentation
 - Issue notification of change
 - Validate change request
 - Assign security (existing and new documentation
 - Copies of the models or “Swim Lanes” are available upon request

What has happened to date (cont)

- ★ 11 May - NETS Team forward NEMAIS Technical Documentation Incorporation White Paper for NSWC review and comments
- ★ 15 May - forwarded to NSWC ERP Data Team Leads for input
- ★ 8 June - consolidated input provided to NSWC BIM, Mr. Ed Gundrum
- ★ 14 June - NAVSEA Philadelphia provided sample TMs and EOSS PDF files with associated Meta Data to NETS Team
 - ★ Purpose: Test the linkage from a Master Record to data loaded in Documentum

“Our” perspective of initial impact

- ★ Document management vice Content Management
 - ★ More in a minute.....
- ★ We assume a Non-ERP Navy will exist for some undefined period therefore dual processes will be required to support our current “As-Is” business processes and ERP “To-Be” processes
 - ★ publishing a Semi Annual Forced Revision or Print on Demand (POD) requirements
- ★ Things like Engineer Drawing and IETMs are not part of Phase A
 - ★ Too many issues to deal with here mentality.....

“Our” perspective of initial impact

- ★ Documents are “linked” to Master Records and Master Records will be created by importing CM data from CDMD-OA (e.g.APLs/RINs)
 - ★ Not everything can be tied to an APL or RIN e.g. EOSS and NSTMs
 - ★ Type 3 records are suspect or not populated
 - ★ Who will maintain the links and for what documents?
- ★ NEMAIS currently does not have an approved security solution
 - ★ 90% of our data is SBU or higher



NEMAIS Tech Doc Incorporation White Paper

Summary of Comments

J. Garner
20 Jun 2001

Management Issues

- ★ Inadequate funding to correct current Tech Data deficiencies
- ★ Infrastructure tools and procedures already implemented in doc mgt for processes other than doc mgt
- ★ Cost of converting existing scripts, codes, processes used in existing DMSs

Technical Issues

- ★ **Cannot handle view & markup of class 4 & 5 IETMs**
- ★ **No technical reason for TMAs with SGML/XML DMS to switch to Documentum**
- ★ **Documentum cannot match component mgt of SGML docs by Content@ and other DMSs**
- ★ **Can't handle many of the proprietary formats of existing Docs**
- ★ **Use of Documentum in authoring is not necessary if standard formats (SGML/XML) are used**

Analysis Limitations

- ★ **Some TMMA s have DMSs superior to Documentum**
- ★ **Contractors with different authoring systems are not addressed**
- ★ **Considers only whole doc mgt and ignores component mgt.**
- ★ **Fails to distinguish revisable/editable source content from viewable/readable published content**
- ★ **Ignores future direction of tech data mgt, i.e., data sharing at information object level**
- ★ **There is no technical reason to demand NEMAIS DMS at all TMMA s under selected option**

Analysis Process Concerns

- ★ **Adequacy of analysis of current and to-be processes**
 - * insufficient sample of TMMA
 - * no external TMMA considered
- ★ **Inadequate consideration of raster doc access and distribution**
- ★ **Under-estimation of:**
 - * data labeling, indexing requirements
 - * data identifier problems with existing legacy data
- ★ **Doesn't address NMCI**
- ★ **Doesn't address shipboard implementation**

NEMAIS Plusses

- ★ Several reviewers agreed with Option 3 selection
- ★ Option 3 eliminates need to impose Documentum on TMMAs
 - ★ a benefit not recognized by ERP